

Disease Control Michigan Department of Natural Resources (DNR) Wildlife Division

Summary of Expenditures – Fiscal Year (FY) 2011-12

FY 2011-12 expenses for disease control efforts in the State of Michigan totaled \$2,075,000. This included the salaries and wages of DNR staff members stationed at deer check stations for surveillance sampling throughout Michigan, DNR Wildlife Disease Laboratory (WDL) staff performing inspections and tests, a contract with Michigan State University's Diagnostic Center for Population and Animal Health (MSU's DCPAH) for disease control testing, and research work related to privately-owned cervid facilities to assess the risk of disease to the state's wild cervids. Additional disease testing and surveillance continued, due to the finding of Chronic Wasting Disease (CWD) in a privately-owned cervid facility in FY 2007-08.

Surveillance and control efforts rely upon an informed public for sample submission and compliance with state regulations. Communication and outreach to the public are accomplished through a brochure, posters, and other materials on bovine tuberculosis (TB) in Michigan wildlife; a brochure about CWD; and information provided annually in the Hunting and Trapping Guide. A section on bovine TB in wildlife is available on the state's emerging diseases website. Additional information and a form for accessing laboratory results are provided on the DNR WDL website.

The information below is a breakdown of FY 2011-12 expenditures into the major components of disease control.

General Fund/General Purpose Expenditures	
MONITORING EFFORTS	\$1,464,100
EQUIPMENT AND SUPPLIES	\$45,600
COMMUNICATION AND OUTREACH	\$30,100

Restricted Fund Expenditures	
MONITORING EFFORTS	\$529,600
EQUIPMENT AND SUPPLIES	\$5,600

TB Testing Procedure

After field collection of specimens, each head is visually (grossly) examined. There are three pairs of lymph nodes in each head that are examined for abnormal tissue and abscesses. The same lymph nodes, along with the lymph nodes throughout the body

(thoracic and abdominal), are also examined in entire carcasses submitted as suspects. Lymph nodes from the grossly suspect deer and elk heads/carcasses are collected in separate containers for both histologic and microbiologic (culture) evaluations performed at MSU's DCPAH. Bacterial culture is performed at the Tuberculosis Laboratory of the Michigan Department of Community Health.

CWD Testing Procedure

Specific lymph nodes sectioned for inspection in each head are the lymph nodes at the base of jaw near the vertebrae. The first step for CWD testing is a screening test called ELISA, which is a protein assay that rapidly (in four to six hours), isolates and detects the abnormal prion proteins in tissues, if they are present. A 200 milligram slice of the lymph node is submitted to MSU's DCPAH for ELISA. If abnormal protein is detected in the ELISA screen, the remaining tissue in that sample is tested using an immunohistochemistry process.